his political opinions, from his position of Professor at the Conservatoire des Arts et Métiers; but this step caused so much discontent among scientific men, and was so vigorously resented by his colleagues, who threatened to resign in a body, that the Government had to reinstate him.

He died on May 11, 1887, in his eighty-sixth year.

NOTES.

THE "Ladies' *Soirée*" at the Royal Society held last night was carefully prepared and largely attended. We shall refer at length next week to some of the objects exhibited.

THOSE who have made the arrangements for the great national ceremony at Westminster Abbey in connexion with the Queen's Jubilee cannot, it would appear, be congratulated on the manner in which they have discharged one of the most important of their functions. On so striking an occasion all the highest interests of the nation ought to be adequately represented; yet some of the most vital of these interests have been practically ignored. "A Student" has alluded to the matter in a letter to the *Times*, and his remarks seem to be worthy of attention. Having referred to the eminent fitness of Westminster Abbey for a ceremony of this kind, he says:—"I imagined gathered together there all the men who by their deeds, their discoveries, their inventions, their writings, or their noble lives and ideas, have helped during the Queen's reign to make England what she is at the present moment, and I imagined, too, that the list of the names of those present might be a roll fit to be handed down to the remotest posterity as an authoritative statement of England's most illustrious citizens in the present year. Proud that the English Government had resolved to act upon such a noble idea, I have been endeavouring to express my enthusiasm and gratitude to many that I have met, with the result that I have found either that my view of the Government's intention was perfectly wrong or that it is being carried out in such a manner that the thing promises to be an expensive and unworthy farce. I have been informed by some who should know *that among those who have already been invited hardly the name of any representative of literature, science, or art has been included.*"

THE Queen has intimated her intention of accepting the Albert Medal, which has been awarded to her by the Council of the Society of Arts. The Albert Medal is annually given for "distinguished merit in promoting arts, manufactures, or commerce."

ALL who remember the important aid rendered by Governor Sendall to the Government Eclipse Expedition to the West Indies last year will be glad to see by a recent *Gazette* that a C.M.G. has been conferred upon him. The same *Gazette* also included the name of Dr. Hector for the step of K.C.M.G. This is also another unexceptionable appointment. We are glad that the authorities at the Colonial Office are making such wise selections; the order of St. Michael and St. George bids fair to eclipse that of the Bath, the civilian distinctions connected with which seem more and more rarely to come in a scientific direction, and to be more and more limited to the spending rather than the thinking departments.

SOME important appointments have just been made at University College, London. Dr. William Ramsay, Principal of, and Professor of Chemistry in, University College, Bristol, has been appointed to fill the Chair of Chemistry, vacant by the resignation of Dr. Williamson; Dr. Sydney Ringer, F.R.S., has been made Holme Professor of Clinical Medicine, in succession to the late Dr. Wilson Fox; and Mr. Victor Horsley, F.R.S., succeeds Dr. Bastian (resigned) as Professor of Pathology.

WE referred lately (p. 87) to a Bill introduced into the House of Commons by Sir Henry Roscoe, empowering any School Board, local authority, or managers of a public elementary school, to provide day technical and commercial schools and classes. Mr. James Stuart has introduced a corresponding measure for the establishment of evening schools and classes which shall give instruction in continuation of that obtained in public elementary schools. The subjects to be taught include the elements of such portions of science as may be likely to be useful to artisans and other persons engaged in industrial and agricultural occupations; also elementary mechanics, mechanical drawing, the elements of art and design, the use of ordinary tools, commercial arithmetic, and commercial geography. For providing these evening continuation schools the powers of School Boards or other local authorities are to be in all respects the same as for providing ordinary public elementary schools. Further, there is to be the power of providing or contributing to the maintenance of laboratories or workshops in endowed schools for the purpose of carrying on classes under the Bill. The schools and classes thus provided are to be subject to the inspection of the officers of the Committee of Council on Education or of the Science and Art Department, and no scholar is to be admitted to a school or class who has not passed an examination in the sixth standard. It is also proposed that School Boards or other local authorities shall have power to provide evening schools and classes, either in connexion with "evening continuation schools" or not, for the purpose of giving instruction in a particular group of subjects, among which are arithmetic, geography, elementary science, drawing, wood-carving, and modelling. The conditions as to these schools and classes do not differ from those as to the continuation schools, except that the standard to be passed previously to admission is the fourth, not the sixth. For any of the subjects taught in evening schools or classes under the Bill the Committee of Council on Education are empowered to give grants on such conditions as they may lay down.

WE learn that the Bentham Trustees have purchased for presentation to the Library of the Royal Gardens, Kew, the unique collection of portraits of *Bromeliaceæ* which were accumulated during a life-long study of the order by the late Dr. Morren, Professor of Botany in the University of Liége. Some of the drawings, which are in all cases of life size, were exhibited at the recent reception of the Royal Society.

IN an article printed in NATURE on January 13 (vol. xxxv. p. 248), Mr. D. Morris dealt with the important question of botanical federation in the West Indies. He again discusses this subject in the sixth Bulletin of Miscellaneous Information, just issued from the Royal Gardens, Kew. For the last hundred years the cultivation of the sugar-cane has been the only important industry in the West Indies, and the fall in the price of cane sugar has seriously affected the general condition of the population. It is estimated that one-half of the surface of these islands, with the exception of Antigua and Barbados, is better fitted for other cultivation than that of the sugar-cane. Fresh industries might therefore be safely started, and Mr. Morris is careful to point out that "by too close an adhesion to purely sugar-growing habits and methods the people act injuriously to their best interests and neglect the numerous resources at their command." It is, however, absolutely necessary that any new enterprises which may be undertaken shall be carried on by persons equipped with adequate knowledge; and no real progress can be made unless the people of the various islands provide themselves with small but good botanical establishments in connexion with the Botanical Department in Jamaica. Something has already been done in this direction. At Grenada a

Botanic Garden is in course of being established under the charge of Mr. W. R. Elliott; and, with the sanction of the Legislature, £100 has been granted for the formation of a botanical station at Dodd's Reformatory, Barbados. A botanical station, for which £300 has been voted, is being made near Castries, St. Lucia. Mr. Morris is of opinion that the prospects of the scheme for botanical federation in the West Indies are, upon the whole, very good. The recent appointment of Mr. William Fawcett to the post of Director of the Botanical Department at Jamaica appears, he thinks, to offer every hope of success to the scheme. "It is also anticipated," Mr. Morris says, "that, while granting valuable aid to the smaller islands, Jamaica, as a centre, will herself derive, both directly and indirectly, considerable benefit from such vigorous and systematic working as would naturally arise in her own area as well as from a larger interchange of plants and seeds with the neighbouring islands."

In connexion with the sixtieth meeting of German Naturalists and Physicians, which is to be held at Wiesbaden from September 15 to 24, there will be an important scientific exhibition. It is intended that the exhibition shall include the latest and best instruments and apparatus used in the study and in the teaching of science and medicine. The following are among the groups to be represented:—Surgery, physical diagnosis and therapeutics; ophthalmology, gynæcology; laryngology, rhinology, and otiatry; orthopædia, dentistry, chemistry, instruments of precision, with subdivision for microscopy; instruments and apparatus aiding instruction in natural history, geography, equipment for scientific travel, photography, anthropology, biology and physiology, hygiene, electro-therapeutics and neurology, and pharmacology. Applications are to be addressed to the Exhibition Committee, 44 Frankfurterstrasse, Wiesbaden.

On Friday, the 3rd inst., the work of constructing the canal which is to connect the German Ocean with the Baltic Sea was formally begun by the German Emperor. The ceremony, which took place at Holtenau, on the Bay of Kiel, consisted of the laying of the foundation-stone of a lock near the Baltic end of the canal. It is estimated that the total cost of the undertaking will be 156,000,000 marks (about £7,800,000). This sum has already been voted by the Reichstag and the Prussian Parliament. The canal is being constructed mainly for naval and military purposes, but in times of peace it will be open to the merchant ships of all nations. The German authorities calculate that it will be used annually by about 18,000 vessels, with a collective tonnage of 5,500,000, and yielding a revenue of 4,125,000 marks (about £206,250).

On Wednesday, the 15th inst., at 3 p.m., Sir H. W. Acland will distribute prizes to students at the Medical School of St. Thomas's Hospital. The ceremony will take place in the Governors' Hall.

Lord Cadogan has offered to present a site for the Free Public Library which is to be erected in Chelsea. He also promises to give £300 worth of books, to which Lady Cadogan adds a gift of £50.

On Tuesday evening a meeting, held in the lecture-hall of the Polytechnic Institution, Regent Street, decided that an effort should be made to secure the establishment of a Free Public Library in Marylebone. Prof. Huxley, who presided, said it was proposed that £20,000 should be raised to cover the cost of the site and building, and he was able to announce that £10,500 had already been promised. If they succeeded in their object, as he was sure they would, they could go to the authorities and the ratepayers and say, "We have done our part of a public duty, now perform yours."

The Corporation of London have voted a donation of one hundred guineas towards the thousand pounds required by the Bethnal Green Free Library Committee for the further development of the Institution.

On the 3rd inst. several shocks of earthquake occurred in Northern California and Western Nevada. They were distinctly felt in the Yosemite Valley.

During the earthquakes in the Sierra Madre, five persons were killed and nineteen injured at Bapipe (Sonora province), and five persons were killed at Oputa. Both towns were completely destroyed. The inhabitants, as well as those of the towns of Barceraca and Quasa, are living in the open fields, shocks being still felt continually. Some places which were quite dry formerly are now submerged.

The Oficina Central Meteorolójica de Chile is endeavouring to keep up and improve the meteorological service of the Republic. Vol. xviii. of its *Anuario*, containing the observations for the year 1886, has been recently published. The first observations published by the Office were for 1869, but for several years past the publication has fallen into arrears for want of sufficient funds. Since the re-organization of the Office in 1885, the *Anuario* has appeared in two-monthly parts, and the management of the service is now intrusted to a Committee composed of members of the Faculty of Sciences at the University of Santiago. There are now twenty-eight stations at which observations are being taken or in course of establishment; the most northerly station is Iquique (lat. 20° 12′ S.), and the most southerly Punto Arenas (lat. 53° 10′ S.), but there are none between this and Ancud (lat. 41° 52′ S.). Many of the stations are provided with the best instruments, ordered from Europe, and the Central Office has a complete outfit of self-recording instruments. The Astronomical Observatory at Santiago has also published meteorological observations, independently, from 1873–84, together with curves of the automatic records.

The *Annalen der Hydrographie und maritimen Meteorologie* for May contains a notice of a fall of volcanic ashes, at Finsch Harbour, on the eastern coast of New Guinea, which lasted from 7 a.m. till about 11 a.m. on February 5 last, and covered the country round with a thin layer of light-gray ashes. On February 2 the whole sky appeared gray, and at noon the sun was of a blood-red colour, while lunar halos and rings occurred for several nights. Captain von Schleinitz states that the north-west monsoon, which prevails at this season, had ceased for four days, and was replaced by fresh southerly winds, but made its appearance again at noon on the 4th. From this he concludes that the volcanic eruption which caused the fall of ashes might have occurred either to the north or south, as the fall did not take place with either the northerly or southerly wind, but during a calm, the ashes having remained suspended for some time. He thinks that a northerly origin is most probable, although they might have been carried thither from an easterly or westerly direction by an upper air-current, or that the volcanoes in Vulcan Island and Lesson Island may have shown unusual activity during the period in question.

The Monthly Weather Review, published by the Chief Signal Officer of the United States, and referred to in our issue of last week (p. 110), has now been received for the six months ending December 1886, making the series complete up to February 1887.

The recent cyclone in the Bay of Bengal, to which we referred last week (p. 110), did much injury both on sea and land. Commenting on the fact that the Viceroy has telegraphed to the Sheriff of Calcutta expressing the regret and sympathy felt by himself and the members of the Government, the Calcutta Correspondent of the *Times* says :—"It is to be hoped that this sympathy will take the practical form of the authorizing an extension of the telegraph to the Andamans and Diamond Island. The latter locality is now recognized as the birth-place of cyclones, and the importance of getting early intimation of their approach cannot be over-estimated."

WE have to record the death of Dr. Karl Friedländer, Professor at the Berlin University, an eminent pathologist and anatomist; also of Dr. Alexander Ecker, Professor at the Freiburg University, a well-known anatomist and anthropologist, and founder of the Ethnographical Museum at Freiburg. Dr. Ecker died at the age of seventy.

THE General Meetings of the Geographical Society and the Botanical Club of Thuringia took place at Saalfeld on June 5.

THE largest Apicultural Meeting and Exhibition ever held in Germany will take place at Hanover from September 22 to 25.

THE Council of the Royal Meteorological Society are anxious to obtain photographs of flashes of lightning, as they believe that a great deal of research on this subject can be pursued only by means of the camera. In a letter which has been sent to persons likely to be interested in the subject, the Council express a hope that now the thunderstorm season is approaching, many photographers may be found willing to take up this branch of their art. It is pointed out that the photography of lightning does not present any particular difficulties. If a rapid plate and an ordinary rapid doublet with full aperture be left uncovered at night during a thunderstorm for a short time, flashes of lightning will after development be found in some cases to have impressed themselves upon the plate. The only difficulty is the uncertainty whether any particular flash will happen to have been in the field of view.

A NEW chlorobromide of silicon has been isolated by Prof. Emerson Reynolds from a large quantity of crude silicon tetrabromide. A current of dry hydrogen was first driven through the crude bromide to remove free bromine, and the residue, after shaking with mercury, was afterwards subjected to fractional distillation. An early fraction, that passing over between 140° and 144°, was separately collected, and, by repeated refractioning, was found to consist largely of a portion boiling at 140°-141°, which proved to be pure silicon chlorotribromide, $SiClBr_3$. This liquid fumes in the air, and, on addition of water, is decomposed into a mixture of silicic, hydrobromic, and hydrochloric acids. It is of considerable theoretical interest, inasmuch as it completes our knowledge of the following series of compounds, in which chlorine and bromine mutually replace each other, and the end members of which are formed by the tetrachloride and the tetrabromide of silicon respectively: $SiCl_4$, $SiCl_3Br$, $SiCl_2Br_2$, $SiClBr_3$, and $SiBr_4$. This series is now perfectly analogous to the one formed by the compounds of chlorine and bromine with carbon.

A NEW quantitative reaction of very wide application, by means of which any desired substitution of chlorine may be readily effected in a large number of hydrocarbons, is described by MM. Colson and Gautier in the last number of the *Annales de Chimie et de Physique*. It simply consists in heating in a sealed tube the calculated quantities of hydrocarbon and phosphorus pentachloride on the supposition, shown by analysis to be well founded, that the pentachloride is dissociated into the trichloride and free chlorine, which latter acts precisely like free chlorine. The great value of this means of substitution is at once seen to consist in the fact that, instead of the uncertain results obtained by the graduated use of free chlorine, it now becomes possible to obtain a quantitative yield, in an easily separable form, of the particular chlorine derivative desired. Thus, in order to obtain benzal chloride, the starting-point in the artificial preparation of indigo, it is only necessary to heat together to 195° for two hours in a closed vessel the calculated quantities of toluene and phosphorus pentachloride.

WE understand that the Rev. J. B. Lock intends to write a "Statics for Beginners" as a complement to the "Dynamics for Beginners" which was recently noticed in these columns. A Key is now being prepared, under Mr. Lock's superintendence, to his well-known "Arithmetic for Schools."

IN their report for the session 1886-87 the Council of the Institute of Actuaries say that the prosperity of the Institute has been fully maintained during the past year. Referring to the new offices at Staple Inn Hall, the Council trust that they have at last secured a permanent and suitable home for the Institute, corresponding to its higher dignity and its ever-increasing duties.

AN International Exhibition is to be held at Glasgow during the summer of 1888. The guarantee fund already exceeds £240,000, and is being increased. The objects of the Exhibition, as stated in the prospectus, are "to promote and foster industry, science, and art, by inciting the inventive genius of our people to still further development in arts and manufactures; and to stimulate commercial enterprise by inviting all nations to exhibit their products, both in the raw and finished state." Examples of the manufactures of Glasgow and the surrounding districts—chemical, iron, and other mineral products, engineering, shipbuilding, electrical and scientific appliances, and textile fabrics—will be shown; and similar and more varied exhibits may be expected from other parts of Great Britain and from the Continent. Promises of support have also been received from America, India, the Canadian, Australian, Cape, and other colonies. The site, which has been granted by the Glasgow Corporation, extends to sixty acres, and the buildings will cover about ten acres.

IN an article in the current number of the *Entomologist*, Mr. J. T. Carrington speaks of a phenomenon which has frequently puzzled him when hunting for insects on salt-marshes. He refers especially to the marshes of the River Medway. The tide often completely overflows the marshes, and for an hour or two turns the collecting-ground into an arm of the sea, with multitudes of rippling wavelets. During this period there is not a sign of an insect flying over the water. "As the tide recedes, and little islands of the taller plants appear through the water," says Mr. Carrington, "we notice the first indication of moths appearing. When the water has left the marsh we examine the wet and sloppy ground, and find multitudes of delicate Tortrices and plumes in perfect condition, flitting about as though nothing had happened to disturb their comfort. Now, where were these moths when the tide covered the marsh some two or three feet deep? One can hardly imagine they were under the water all the time, though there was not a sign of them over it. Many times have I watched this rising and falling of the tide, but never solved the problem."

IN the June number of the *Zoologist*, Mr. Murray A. Mathew describes what he calls "a strange capture of a hare." A neighbour of his in Pembrokeshire was crossing one of his fields late in the evening when he heard a hare crying. He went in the direction, expecting to find a hare in a trap, but was astonished to come across one attacked by a hedgehog, which was holding on to one of its hind legs. The hare (fully-grown) seemed paralyzed by fear, and allowed itself to be lifted up. Directly the hedgehog was shaken off the hare died, although the injury it had received from the bite of its assailant was but slight.

A NEW weekly newspaper, devoted more especially to the commercial side of the chemical and allied industries, is being issued by Messrs. Palmer and Howe, of Manchester. It is called the *Chemical Trade Journal*, and is edited by Mr. George E. Davis. Two numbers have already appeared.

THE additions to the Zoological Society's Gardens during the past week include two Egyptian Jerboas (*Dipus ægyptius*) from Egypt, a Moorish Toad (*Bufo mauritanica*) from Tunis, presented by the Hon. Terence Bourke; a White-crowned Pigeon (*Columba leucocephala*) from the West Indies, presented by Lieut.-Colonel W. G. Dawkins; a Common Trumpeter (*Psophia crepitans*) from Demerara, presented by Mr. G. H. Hawtayne; a Crowned Horned Lizard (*Phrynosoma coronatum*) from Texas, presented by Mr. Claude A. Millard; two Egyptian Jerboas (*Dipus ægyptius*) from Egypt, deposited; two Cape Sparrows (*Passer arcuatus*), four Alario Finches (*Alario alario*) from South Africa, purchased; a Wapiti Deer (*Cervus canadensis*), born in the Gardens.

OUR ASTRONOMICAL COLUMN.

COMET 1887 *e* (BARNARD, MAY 12).—Dr. H. Oppenheim supplies the following improved elements for this comet in Dun Echt Circular No. 147:—

T = 1887 June 17·2209 Berlin M.T.

$$\left.\begin{array}{rrrr} \pi - \text{☊} = & 15^\circ & 40' & 19'' \\ \text{☊} = & 245 & 13 & 1 \\ \iota = & 17 & 31 & 52 \end{array}\right\}\text{ Mean Eq. 1887·0.}$$

$$\log q = 0·14288$$

Ephemeris for Berlin Midnight.

1887.	R.A. h. m. s.	Decl. ° ′	Log Δ.	Log *r*.	Brightness.
June 13	16 13 43	7 50·3 S.	9·6006	0·1432	1·5
15	16 18 17	6 20·5			
17	16 22 51	4 53·9	9·6077	0·1429	1·5
19	16 27 26	3 30·8			
21	16 32 1	2 11·4 S.	9·6182	0·1433	1·4

The brightness on May 14 has been taken as unity.

MINOR PLANET NO. 266.—This object has received the name of Aline.

THE PARALLAX OF α TAURI.—Prof. Asaph Hall has published in the *Astronomical Journal*, No. 156, a determination of the parallax of this star deduced from measures of the position-angle and distance of the eleventh magnitude companion made with the Washington 26-inch refractor between October 2, 1886, and March 15, 1887. The resulting values of the relative parallax are: from measures of angle, π = + 0″·163 ± 0·0409, and from measures of distance, π = + 0″·035 ± 0·0431. The mean value of the parallax of α Tauri from these observations is therefore π = + 0″·102 ± 0″·0296. It will be remembered that M. O. Struve recently published a determination of the parallax of this star, referred to the same comparison-star, and found π = + 0″·516 ± 0″·057.

MADRAS MERIDIAN OBSERVATIONS.—A volume of Madras astronomical observations at last! In 1887 Mr. Pogson publishes the results of the meridian circle work during 1862, 1863, and 1864. A prefatory epistle addressed to Sir M. E. Grant-Duff, late Governor of Madras, speaks of "the removal of certain arbitrary and suppressive restrictions which have prevented me and my predecessors from attempting anything of the kind for considerably more than thirty years past," but gives the reader no more definite information as to the reason of this unparalleled delay in publication, nor why the Madras Observatory should have thus fallen from the high position which it formerly held. The instrument with which the observations now published were made is a transit-circle constructed by Messrs. Troughton and Simms, in consultation with the late Mr. Carrington. The object-glass is of 5½-inches aperture, and the circle of 42-inches diameter. It was brought into use in May 1862, and was devoted to the observation of stars down to the fifth magnitude, the moon and accompanying stars, Mars and comparison stars at successive oppositions, minor planets, and as many stars of more than 120° N.P.D. as could be found, not less than the eighth magnitude. The present volume contains star places only. The ledgers and catalogues of mean places for each year are given separately and take up much more space in printing than is necessary for mere annual results. Altogether 227 stars were observed in 1862, 782 in 1863, and 1000 in 1864. A comparison between the Madras places of time-stars and those of the Nautical Almanac (on the R.A.'s of which those of Madras depend) shows a good agreement in R.A., but in N P.D. a mean excess of the former of + 0″·7, which "renders it certain that the Polar Distances will require some further small correction before being formed into a final general Catalogue."

ASTRONOMICAL PHENOMENA FOR THE WEEK 1887 JUNE 12-18.

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on June 12.

Sun rises, 3h. 45m.; souths, 11h. 59m. 29·5s.; sets, 20h. 14m.; decl. on meridian, 23° 9′ N.: Sidereal Time at Sunset, 13h. 37m.

Moon (at Last Quarter on June 13) rises, 0h. 5m.; souths, 5h. 13m.; sets, 10h. 30m.; decl. on meridian, 10° 32′ S.

Planet.	Rises. h. m.	Souths. h. m.	Sets. h. m.	Decl. on meridian. ° ′
Mercury	4 46	13 16	21 46	25 12 N.
Venus	7 4	15 6	23 8	21 21 N.
Mars	3 2	11 9	19 16	22 7 N.
Jupiter	14 57	20 16	1 35*	8 51 S.
Saturn	6 6	14 11	22 16	21 49 N.

* Indicates that the setting is that of the following morning.

Variable Stars.

Star.	R.A. h. m.	Decl. ° ′		h. m.	
U Cephei	0 52·3	81 16 N.	June 13,	0 55	*m*
			,, 18,	0 35	*m*
R Crateris	10 55·0	17 43 S.	,, 15,		*m*
U Virginis	12 45·4	6 10 N.	,, 13,		*M*
R Hydræ	13 23·6	22 42 S.	,, 12,		*m*
R Boötis	14 32·2	27 14 N.	,, 18,		*m*
δ Libræ	14 54·9	8 4 S.	,, 18,	1 26	*m*
U Coronæ	15 13·6	32 4 N.	,, 14,	21 31	*m*
U Ophiuchi	17 10·8	1 20 N.	,, 15,	1 0	*m*
W Sagittarii	17 57·8	29 35 S.	,, 13,	1 0	*M*
R Scuti	18 41·5	5 50 S.	,, 18,		*m*
β Lyræ	18 45·9	33 14 N.	,, 17,	2 0	*M*
R Delphini	20 9·5	8 45 N.	,, 18,		*M*

M signifies maximum; *m* minimum.

Meteor-Showers.

	R.A. °	Decl. °	
Near β Lyræ	282	32 N.	
ζ Cygni	320	32 N.	
β Piscium	345	0	Very swift.

GEOGRAPHICAL NOTES.

IT may interest our readers to know that a full account of Baron Nordenskjöld's narrative of his very interesting journey across Greenland has been published in German by Brockhaus, of Leipzig, with numerous maps and illustrations. Doubtless, like the same explorer's previous narratives, it will soon appear in an English dress. We are assured that Nordenskjöld will not undertake any Antarctic expedition before 1888 or 1889, if, indeed, he undertakes it at all, which is highly doubtful. He has much to do still before the publications connected with the *Vega* Expedition are complete, and he has a variety of other work in hand which must be finished before he enters on any new undertaking.

THE paper read at Monday's meeting of the Royal Geographical Society was one of unusual novelty and interest. It described the exploration which Mr. H. E. M. James, of the Bombay Civil Service, in company with two friends, made last spring and summer in Manchuria. The region explored extends from the Yellow Sea to beyond 45° N., and between 122° and 130° E. long. A considerable section of the journey was over virtually new ground, and as Mr. James is a careful observer, and, we believe, a botanist, and an accurate describer, his paper is of some scientific value. He has at least been able to add some precise features to our maps of the region. The paper contains